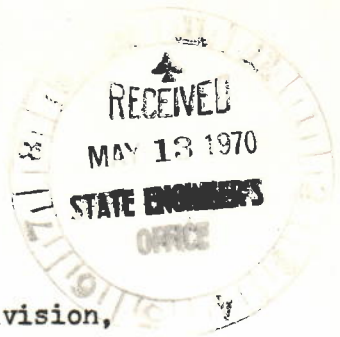
Office of Sevier River Commissioner
DELTA, UTAH R.F.D. 84624

May 8, 1970

W. ROGER WALKER



Mr. Daniel F. Lawrence,
Director, Water Resources Division,
535 State Capitol Building,
Salt Lake City, Utah 84114

Dear Sir,

Enclosed is a general description of the Central Utah Water Company and an outline of the proposed study.

I would very much appreciate any suggestions from you or your staff.

Yours very truly,

Roger Walker

ROGER WALKER
Sevier River Commissioner
Delta, RFD, Utah 84624

RW/erw

Enclosure

DISCRIPTION OF CENTRAL UTAH WATER COMPANY

The Central Utah Water Company was organized at a time when the water supply of the Sevier River was large with much water going to waste. The appropriations of water made prior to this time far exceed what has become "normal" since the twenties, consequently the Central Utah Water is essentially a high water right. The original filings were for 250,000 acre feet of water to be applied to the described 345,000 acres.

By negotiation and construction of the enlargement they became a part of the storage rights of Sevier Bridge Reservoir.

The rights of the Central Utah Water Company are now as follows: 5% of the first 104,000 acre feet. 57% of all over 104,000 acre feet. When the capacity of Sevier Bridge is reached the Central Utah Water Company has the right to use or store in Fool Creek Reservoir a percent of the flow by Sevier Bridge Reservoir equal to their ownership in the whole. In addition they have the storage rights for all in excess of 9300 acre feet of water made below Sevier Bridge Reservoir during the non-irrigation season. They also purchased direct flow rights of a maximum 18.7 c.f.s. of "A" primary, 3.3 c.f.s. "AA" water, 1000 acre feet from Mohlen Springs, and up to 3,000 acre feet from the exchange users for storage rights in Sevier Bridge Reservoir. In the high water years it appears that the development reached the point where approximately 45,000 acres were irrigated. This acreage shrinks to somewhat less than 10,000 acres in the dry years. The diversions of the Central Utah Water Company range from approximately 8,600 acre feet to 60,000 acre feet.

A feature of the totally diverted Sevier River should be mentioned. The first appropriations were for the low-lands next to the river. The development

of the higher and generally better lands was more difficult and came later. Central Utah Water Company is the most prominent example of a very expensive development for some of the most productive land in the Sevier River System with the driest and most fluctuating right on the river.

It has been generally supposed that because of a low delivery/diversion ratio, particularly headgate delivery through approximately 40 miles of canal to the South end, that no water could be developed that would be economically feasible that could be delivered to the South end of the system. In 1966 a loss study was made from May 1 to June 8. This consisted of a rated section recorded at the inlet where water is divided to go to the South end, and rated sections guaged at three highway bridges. The guaged sections extended to the Delta-Holden Bridge and were read daily. This study indicated the variation of areas of seepage loss, administrative losses, and problems of system maintenance. A preliminary check this year shows significant improvement. It suggests the possibility that even with higher losses they are in the regime where with the above average productivity of this land the benefits per acre foot at the diversion might be comparable with other good farming areas.

The opportunity to evaluate the system at a time when the canal is in use during most of the season has occurred only occasionally and not since 1953. It is therefore proposed that a study be made this year. The facilities would consist of water stage recorders installed at the following points; 1. Landis Point, which is the inlet for deliveries for the South end. 2. Oak City-Lynndyl Bridge. 3. Oak City-Delta Bridge. 4. Drovers Lane near McCornick. This would give a stretch of approximately 30 miles of canal with only very limited diversion - 2 or 3.

The sections would be rated and maintained for this season only with the following objectives in mind.

1. Segregate seepage losses from administrative losses.

2. Determine extent of seepage loss in each segment with the possibility that a limited section could be identified that lining would give maximum benefits to improve the system record as a whole. If projects could be identified as within the ability of the company to construct that would improve the economic feasibility of diverting new water, the company could develop an overall plan and fit the limited projects into it.

3. Identify optimum rates of flow in the canal that would allow the company to make some management improvements.

4. To see if seepage losses decrease with increased time water is in the canal.

5. Indicate the condition of the measuring system at the farmer's headgate with the idea of improving the record of diversions.

6. To give an idea as to whether or not the seepage "losses" should be given further study to determine what extent they are truly lost.

COST ESTIMATE

Assuming three A-35 recorders could be borrowed.....	
Culvert sections to house recorders @ $125	$ 375
Installation of recorders	$ 50
Mileage and time for five rating trips @ $ 50	$ 250
Mileage and time to check recorders @ $25	$ 125
Time to work strips and compile records	$ 300
	$1100.00

It is suggested that the Central Utah Water Company pay half the cost of the project.

Noted:
5-13-70